

1 1. A method of allowing a video stream to be
2 displayed and recorded comprising:
3 allowing a first portion of a video stream to be
4 written to a storage medium while a second portion of a
5 video stream is being read from a storage medium; and
6 providing a zoom function so that the second
7 portion may be scaled for implementing the zoom function
8 while said first portion of the video stream is being
9 written.

1 2. The method of claim 1 further including allowing
2 the video stream to be written to a hard disk.

1 3. The method of claim 1 further including allowing
2 the video stream to be written to a random access media.

1 4. The method of claim 1 further comprising:
2 retrieving two or more frames of the video stream
3 shifted by different time delays;
4 displaying the two or more frames of the video
5 stream; and
6 allowing a user to select one of the frames of
7 the video stream as a starting point for playing back the
8 video stream.

1 5. The method of claim 1 further including providing
2 at least two pre-defined screen segments and allowing the
3 user to select one of the two segments to be scaled.

1 6. A method for enabling a user to automatically
2 record a television program comprising:
3 providing an electronic program guide; and
4 linking the program guide to a digital storage
5 device such that when a program is selected in the
6 electronic program guide the program is automatically
7 recorded.

1 7. The method of claim 6 further including allowing
2 said electronic program guide to be selected by mouse
3 clicking an icon on a television display screen.

1 8. The method of claim 6 further including allowing
2 said electronic program guide to be selected by operating a
3 remote control.

1 9. The method of claim 6 further including allowing
2 a first portion of a video stream to be written to a
3 storage device while a second portion of a video stream is
4 being read from the storage device.

1 10. The method of claim 6 further comprising:
2 retrieving two or more frames of the video stream
3 shifted by different time delays;
4 displaying the two or more frames of the video
5 stream; and

6 allowing a user to select one of the frames of
7 the video stream as a starting point for playing back the
8 video stream.

1 11. A method of enabling a video stream to be stored
2 and displayed at the same time comprising:

3 allowing portions of the video stream to be
4 alternately written to and read from a storage device; and
5 storing in a temporary buffer the next portion to
6 be written to the storage device while another portion is
7 being read from said storage device.

1 12. The method of claim 11 further including
2 displaying a portion of a video stream at least initially
3 delayed by a time delay, wherein when the time delay is
4 greater than a predetermined threshold, displaying the
5 video stream from the storage device and when the time
6 delay is less than the predetermined threshold displaying
7 the video stream without storing said stream.

1 13. The method of claim 11, further including
2 allowing one or more portions of the video stream to be
3 read from the storage device to retrieve the video stream
4 with one or more time delays that are user-specified.

1 14. The method of claim 11, wherein allowing the
2 video stream to be written to the storage device further

3 comprises allowing the video stream to be compressed prior
4 to writing the video stream to the storage device.

1 15. The method of claim 12, wherein allowing portions
2 of the video stream to be displayed from the storage unit
3 when the time delay is greater than the predetermined
4 threshold comprises decompressing the video stream after
5 retrieving the video stream from the storage unit.

1 16. An article comprising a medium for storing
2 instructions that cause a computer to:

3 allow a first portion of a video stream to be
4 written while a second portion of a video stream is being
5 read; and

6 provide a zoom function so that the second
7 portion may be scaled for implementing the zoom function
8 while said first portion of the video stream is being
9 written.

1 17. The article of claim 16 including instructions
2 that cause a computer to allow the video stream to be
3 written to a random access media.

1 18. An article comprising a medium for storing
2 instructions that cause a computer to:

3 provide an electronic program guide; and
4 link the program guide to a digital storage
5 device such that when a program is selected in the

6 electronic program guide the program is automatically
7 recorded.

1 19. The article of claim 18 including instructions
2 that cause a computer to allow a first portion of a video
3 stream to be written to a storage device while a second
4 portion of a video stream is being read from the storage
5 device.

1 20. An article comprising a medium for storing
2 instructions that cause a computer to:
3 allow portions of the video stream to be
4 alternately written to and read from a storage device; and
5 store in a temporary buffer the next portion to
6 be written to the storage device while another portion is
7 being read from said storage device.

Sub B1 21. A method of reading and writing data from a
2 storage device comprising:
3 storing data in a plurality of buffers; and
4 transferring data from at least two buffers at a
5 time to and from said storage device.

1 22. The method of claim 21 wherein the buffer size is
2 greater than or equal to the time it takes to read or write
3 from two buffers to and from the storage device.

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2 23. The method of claim 22 wherein the buffer size is
3 greater than or equal to the time it takes to read or write
4 from two buffers to or from the storage device plus the
5 average seek time of the storage device per read or write
transaction.

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2 24. An article comprising a medium for storing
3 instructions that cause a computer to:
4 store data in a plurality of buffers; and
5 transfer data from at least two buffers at a time
to and from said storage device.

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2 25. The article of claim 24 wherein the buffer size
3 is greater than or equal the time it takes to read or write
from two buffers to and from the storage device.